

SINCUS NEWS

P.O. BOX 36, JOHNSON CITY, NY 13790

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Articles in SINCUS are the sole
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Sinclair Computer Users Society

Comments and articles should be
submitted to:

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P.O. BOX 523
OWEGO, NEW YORK 13827

TIMEX + Sinclair



Where's the TIMEX Computer Corporation?

What happens to the million TIMEX/Sinclair computer owners?

We at the Sinclair Computer Users Society (SINCUS) don't have all the answers, but we are looking.

We meet the 3rd Wednesday of each month, at 7 pm, at the Vestal Public Library (March 21 and April 18, for sure) You can meet with users of the ZX80, ZX81, TS1000, TS1500 and the new TS2068. Review software, see hardware, learn and teach, write for a newsletter, add to a tape library, borrow back issues of computer mags. Meetings are open to the public. Stop in, listen and join in. For info write to and include a SASE for a fast reply:

SINCUS
P.O. Box 36
Johnson City, NY 13790





SCHOENWETTER'S
SIGNALS

Tips from Dave Schoenwetter

Here are some tips for machine code programming on the TI-MEX-Sinclair machines which I have found to be very useful especially when working with the 2K system. All tips will work in 16K systems too.

(1) I have accidentally deleted my 1 REM statement when editing the BASIC part of my program on many occasions. To eliminate the possibility of deleting your 1 REM statement which contains your machine code program, ENTER 1 REM followed by enough characters to hold your MC program. POKE 16570,0 which will change 1 REM to 0 REM! The program will now LIST and RUN but the 0 REM cannot accidentally be deleted!

(2) With large 1 REM machine code programs on 2K systems the computer often gets in a loop when attempting to edit BASIC. This causes a continuous loop LISTING (or trying to) the 1 REM statement. To prevent this I added a couple of Hex 75's near the beginning of 1 REM text. This prevents a LIST beyond the "Hex 75". One disadvantage is that you must ENTER LIST 2 to see your BASIC program. However it's better than losing your program to the "LIST loop".

(3) For anyone interested in ENTERING machine code, I wrote a machine code program that loads itself above RAMTOP 2K or 16K and uses 128 bytes of storage. By using four lines of BASIC the program then waits for the user to ENTER a four digit Hex address. The MC program then PRINTs to the screen 128 bytes of Hex data. The decimal address of the entered Hex address is also printed. The program is then in the INPUT mode for Hex data. Any number of bytes may be ENTERed on one line. The character "G" will skip over a byte and move the cursor by one byte. Any incomplete byte or non-valid Hex character (except G) will terminate the program with an error. I will bring a copy of the program to the next meeting.

Dave Schoenwetter
SINCUS, March 1984

WANT ADS:

SINCUS members may list up to 22 lines free in this space. All others may list for a donation.

Advertising rates for other ads are as follows:

BUSINESS CARD SIZE: \$ 3.00
QUARTER PAGE AD: \$ 5.00
HALF PAGE AD \$10.00
FULL PAGE AD \$16.00

Ads run for at least 100 copies even if that takes two issues.

***** EXTRA *****

SINCUS received the following letter:

My name is Ed Cotton and I am interested in exchanging T\$1000 16K programs. At present I've over 100 programs, most of them are 16K required. They range from utilities like UU-CALC, M-coder or Tool Kit to games and adventure programs.

If anyone in your group is interested, please drop me a line at the address above (below) or call me at 315-336-8789.
8025 NOW FLOYD ROAD
ROME, NEW YORK 13440

→ → → → → FOR SALE ← ← ← ← ←

~~TIME-16:00:00 1984~~

With the 16K RAM and keyboard in a cabinet. Beautiful!!

LAMBDA power supply.
RADIO AMATEUR CODE INTERFACE and code program. Dozen other programs plus 3 or 4 books.

PRICE IS NEGOTIABLE
ALSO has Mindware printer \$65

CONTACT: JACK DAVIS
P.O. BOX 5
Endwell, NY 13760

PHONE: (607) 862-4488

don't sell your ZX81 down the river

by GARY COLE, SINCUS

Have you noticed a distinct change in attitudes about the ZX81? Now, suddenly, from "wow, I can't believe how much we can do with so little!", it's "ZX81 w/rampack, for sale, cheap." It seems the time has come--my little computer is, shudder, obsolete. And to think that just a few months ago it was state-of-the-art in "el cheapo" computing. Two things bother me though: 1. I bought my ZX to enjoy it, and I still do enjoy it. 2. I bought my ZX to learn from it, and it still has a lot more to teach me. One of the things I have enjoyed learning is that hardware additions and modifications are not just for the experts.

keep it simple with lsi

The first time you wrote a working program, did you have any understanding of just what the computer was doing? Probably not. You really didn't need the technical information to make it work. The computer was simply a "black box" between the keyboard and the TV. When you put the right program and data in one side of the box, out popped the correct answers. OK, so you were no whiz-kid at that point, but you had a functional understanding. That same kind of functional understanding is all you need to use those fancy sound chips, I/O chips, decoders, static rams, etc., etc. Unlike the hardware hackers of yore (yore being about five years ago), we are blessed with cheap, simple, off-the-shelf, single-chip, "black-box" solutions to some very complicated problems. Original solutions to these problems would require a very deep understanding of electronics, and lots of time and money, but a functional understanding of these "black-boxes", enough to use them, is in range of the novice. Large scale integration makes the job easy.

DON'T SELL continued top this pg

BRICK WALL continued

included an explanation here, this article would become a bit cumbersome, but I promise to continue with it next time. In the meantime, think about the problem. Change the programs around. Note any "sudden" changes when the numbers you use are powers of two, or almost powers of two! It's good to try to understand this problem, because it can crop up in many other (not to obvious) ways, and understanding it can save you many hours of head scratching when your "perfect" program just won't work.

an adventure in five books

How do you learn to "program" these little black boxes? The first book I recommend is "The TTL Cookbook" by Don Lancaster. It takes a nut and bolt approach, and is not specifically aimed at micro-computing, but it is useful for learning the care and feeding of TTL chips and how basic logic circuits work.

The second book is "Computer Peripherals That You Can Build", by Dr. Gordon W. Wolfe. The first 50 pages cover digital gates and logic and define the most used computer words. The remainder of the book details how to easily connect your computer to printers, motors, sound chips, plotters, joysticks, household circuitry, etc. If you're a newcomer to ZX add-ons, this book may get you thinking. The projects are cheap, simple, and easy to build, and almost all include actual schematics instead of the dreaded "block diagram".

"From Chips To systems" by Rodney Zaks, is a step-by-step tour of today's micro-computer chips and how they all fit together to produce a wide variety of systems. Zaks is somewhat more theory oriented than the other authors, but he still examines and evaluates individual chips by number and manufacturer. He also gives at least two examples of each type of chip in different applications. The book is very complete, from the history of microprocessors to the future, from 4 bit to 16 bit chips, from traffic signal controllers to personal computers, it covers it all.

The fourth book is really many books. Nothing can substitute for the manufacturers specs to provide our "black-box" understanding. Many provide examples of working circuits, and all are the last word on how to use these chips. Get your hands on some of these books. Any with the 8200 series of chips are fine. These are easy to adapt to your ZX81 and most are cheap. If you want a quick look or photo-copy of a spec-sheet, the Unicorn electronics store has a wide selection and a copier.

Finally, as members of a computer club, we all have one other fine reference book, one that's hard to beat for specific life-saving advice: the telephone book. If you have an idea or problem concerning your computer and its hardware, call someone. Fellow club members have been more than helpful to me, and I would particularly like to thank Bridgett Kremenec, Jerry Kendrick, and Wes Brzozowski.

Maybe, before you give your ZX to your nephew, or sell it for small dollars, you should take off the back cover and experiment a little. There's a lot of fun and learning lurking in there. OK, it's "obsolete", but how many machines won't be after just a few years?

Gary L Cole

TIMEXLY TIPS

TIMEX COMPUTER CORPORATION
WATERBURY, CONNECTICUTT

To Whom It May Concern;

I was astounded when I read you had decided to get out of the home computer market. I am writing to ask you to reconsider before it is too late.

I have worn TIMEX watches as long as I can remember. They were purchased for their value!

I purchased a TIMEX-Sinclair 1000 computer when they first came out for the same reason - its value. I wanted to find out if I liked computing! I have now discovered that I love computing and am willing to invest more in my home computer. I now own the 2068 and the printer, plus seven 2068 software titles. I look forward to buying a monitor and 80 column printer plus more memory.

I have shown the 2068 to many people and they are rightfully impressed, as have been the industry magazines.

This all doesn't make much sense unless it can be profitable for you, I know that! The problem in this market is for \$250 or less there is not room for a commission that pays someone to hold the users hand. You have the network of retail outlets, now invest in a network of user groups across the country. You would be surprised how much the people in these groups will sell for you if you would but step in and give them your support.

I hope that this may help you to decide to hang in there a bit longer - someone is going to make money in the low end home computer market, why not you!

Its like cancelling the Emmy winning series!

Sincerely,

YOUR NAME HERE!

SINCLAIR RESEARCH LTD.
3 Sinclair Plaza
Nashua, New Hampshire 03061

To Whom It May Concern;

I own a TIMEX-Sinclair home computer. What support or products may I obtain through you. I am particularly interested in the products for the TS 2068!

I hope you will step in and continue your success story in the home computer market!

Sincerely,

YOUR NAME HERE

A DIFFERENT APPROACH:

How do I write a program so the computer will do something every so many times? If it is doing something 200 times, but every 40 times I want it to stop and do something else. You say just write IF k=40, IF k=80, etc. Fine but what if k and my frequency have no easily defined limits?

In line 168 we enter the frequency. In 170 we divide the k, or number of executions so far by our frequency. In line 188 we test to see if that ~~is~~ **AN** is an integer and therefore time to branch!

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166 CLS : PRINT "Normally I break every 75 lines for newsletter format. Enter thenumber at which you want me to make a break so the printer copy may be cut. DO NOT ENTER "0"!"
167 PRINT "Total length of this item is"; TAB 10; s; " LINES"
168 INPUT "ENTER number now "; break
170 FOR k=1 TO s
175 POKE 23692,255
180 PRINT w$(k)
185 LET skip=k/break
186 IF skip=INT skip THEN LPRINT "#####"
190 LPRINT w$(k)
195 NEXT k
```


2K EXPRESS

by Gary Ennis

**** EXTRA ****

Sinclair Makes Whiz Kids!!

Did you see the WHIZ KIDS television series when a Sinclair or TIMEX saved the kids! "Ralph", the series' usual hero computer had been taken away and Richie only had one way to clear his name and prove that the TV ratings were being tampered with. Enter that "cheap" computer with the membrane keyboard. Hooked up with a modem Richie accesses the ratings companies computer and shows what the real ratings are. One big gold ★ for the Sinclair! Funny thing, though. The credits at the end of the program never mentioned TIMEX or Sinclair. They (the credits) are likely the same each week. I'd think someone in production would have seen it. But then the credits are for technical assistance. Knowing what's being said here and in other users groups I suspect the people on Whiz Kids probably were told on the HOT LINE number that "We don't do basic workings!" Having not gotten any technical support, Whiz Kids didn't give any credit for it! I don't know it happened at all this way, but we know it has happened to other people! Too bad, too, as TIMEX was. I believe the first with a HOT LINE. I know only one road paved with good intentions! ☺!

2K EXPRESS
SINCUS
March 1984

NEU-here is hoping that this is the first of new breed of SINCUS publications. As you must have noticed this isn't a mimeograph newsletter!! It is being done by photocopy. We've been offered a chance to have the newsletter produced for a slightly higher cost per copy than we have been paying. The benefit of a photocopy product is we can now faithfully print LISTINGS! The actual printer listing will be used when we do this, thus you should be able to key it in and it will RUN without problem. I would like to see some short program listings submitted for our publication. By short, I mean will the entire listing fit on two 8x11 sheets of paper? That leaves a third page for the explanation of the LISTING! So I am hoping that this new technology will be a big boost in club morale - we certainly need it, what with the news of TIMEX dropping out!

PRINT-I hope this paste up system does work, but please give me a little time to develop some skills at it. I am already doing some coverup work on pages for next month to blot out the "pasteup shadows".
DRAW-we sure could use some real artwork! I am trying to do some 3 dimensional letters using UU-3D software, but time limits did me in for this issue. Anyone out there got any ideas for the artwork. Thanks for the covers goes to the Pres, Paul Hill. But we need artwork for each heading like TIMEXly Tips! Use the ones in this issue as a guide. If you produce something really neat, I will let you do ALL of the headings! ☺

EDIT-this format makes it much easier for me to do my job. I'm hoping that these printer copies do copy okay. We've seen poor copies of printer stuff in other newsletters. At this point I've not seen the results yet!
READ-carefully the article by Wes on the "Brick Wall". Those with TS 2068's be prepared for a different result than your 1000 friends get!

LLIST-I am particularly proud of the program that I wrote yesterday in an hour or so. I will demonstrate it at the next meeting. It printed all the text in this newsletter! It was necessary as my electric typewriter turned up broken when I got it out to type the newsletter! The great attribute of the 2068 is that it is a programmer's machine! I won't claim these two programs are the final answer, but they're okay

for a couple hours work! First, program A allows you to type in 22 lines of text. You may then review each line and make any of the changes that may have become necessary by the 32 spots per line format. You may also print out a copy of the 22 lines. The 22 lines may then be saved to tape. The editing function is, I am sure, clumsy by word processing standards, but this is not a "word processor" it is a news letter FORMATTER! Well, the second program puts the separate parts together, allowing the editor to leave a gap in the copy at any point to facilitate cutting and pasting to permit a fit into the available space. An IF-THEN statement is used to do it-see TIMEXly Tips for the answer. Program B also provides that if the first printout is not what will work then you may easily obtain any number of subsequent printouts, until you get the exact fit that you need!

BRIGHT-I am not certain of the telephone exchange and area code but Digital Research's home numbers (not the 300 ones) are 3030 3035, and 3033!! But where did the 3039 come from! These are, of course, the numbers of the chips (microprocessors) most often associated with Digital!

DATA-congratulations, Mr. and Mrs. Wes Brzozowski on the arrival of their new baby daughter.

♥♥♥♥♥ HOLLY JEAN ♥♥♥♥♥
BORN: January 6, 1984

OPEN/CLOSE-much has been said on the subject of TIMEX dropping a bomb with their announcement of dropping out of the home computer market. I have a myriad of ideas on the subject, but I will try to confine my thoughts to a few succinct reports I have read plus my personal experience with TIMEX.

FIRST, as I stated in 2K EXPRESS a couple of month's ago-there is a second name on my computer and that is Sinclair. We are not the TIMEX club, we are the Sinclair Users Society. We have to hope that Sinclair will follow thru here in the colonies. I would suggest that everyone who is concerned at this point-WRITE A LETTER to TIMEX and Sinclair! The addresses are in TIMEXly Tips plus an idea for what you might say. The part about being raised with TIMEX watches is optional, but if it is true use it!

The latest news release that I read on the subject quoted a TIMEX executive as saying they announced now so as to give the

catalog people enough lead time to plan their fall catalogs. He continued with the statement "We will continue to build computers until we run out of parts-some months from now! If that is the real answer, why didn't TIMEX say that to start with!

The TIMEX-Sinclair 2068 (and the first mistake-after not getting it out in March of 1983-was NOT naming it the "2000"!) has gotten rave reviews by every publication that has reviewed it! The unfortunate problem is the great reviews are coming after the show is cancelled! But America is not without precedent in this situation. The consumer has to express the demand. We need to expedite the development of the strongest network of user groups in the industry. And through the influence of such unity we must let the manufacturers know that there is a demand of substantial proportions out here!

My father used to preach "Never underestimate a man's ability to pay for something that he wants" TIMEX seems to keep trying to do it on price. T31000 was #1 in the market! Oh, you say the TI and VIC 20 had color and real keyboards and bells and whistles they did - but they also had a few drawbacks-like expensive other stuff-like tape recorders, memory expansion units, and the stuff called software. The TIMEX might have been in black/white but it held no hidden extra cost. It was the best of the \$99 investments-if you didn't know if you liked "computing"! If you did like computing why not admit computing costs more than \$100!

- My unfortunate conclusion keeps coming back to the facts that
1. TIMEX seems to have been in a bad financial position BEFORE they took on the computers! They were looking for a quick way out? Remember TIMEX isn't on the stock exchange, it is still a private company
 2. There is a questionable market for a computer that only costs \$100 or even \$250. The reason for the question is: what does it do that I need! I teach a course in HOME computers and, unless you need mailing labels for your cards you may be hard put to use a home computer-EXCEPT for EDUCATION-the computer can be a great teacher!

* MANY, MANY, THANKS to Paul, *
* Carl, Wes, Gary (Cole) and *
* Bill for contributing to *
* this month's SINCUS. *

Gary Ennis
2K EXPRESS